REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-27, and 29-42 and 44 are pending in the present application. Claims 15, 16, 27, 29, 40 and 44 have been amended herewith. The changes to the claims are supported by the originally filed specification, for example, by paragraphs 0064 and 0065. Thus, no new matter is believed to have been added.

In the outstanding Office Action, Claims 27, 29-36 and 38-40 were rejected under 35 U.S.C. § 103(a) as unpatentable over "PolyCon Management System Order Catalog" in view of Masahiko (JP406284118A); Claims 37 and 41-42 were rejected under 35 U.S.C. § 103(a) as unpatentable over "PolyCon Management System Order Catalog" in view of Masahiko and further in view of U.S. Patent No. 5,673,087 (hereinafter "the '087 patent"); Claims 1 and 44 were rejected under 35 U.S.C. § 103(a) as unpatentable over "PolyCon Management System Order Catalog" in view of the '087 patent; Claims 2-26 were rejected under 35 U.S.C. § 103(a) as unpatentable over "PolyCon Management System Order Catalog" in view of the '087 patent, and further in view of the '564 patent; and various claims were rejected under obviousness-type double patenting as being unpatentable over the claims of U.S. Patents Nos. 6,345,323, 6,112,264, 5,884,096, and 5,721,842.

Applicants acknowledge with appreciation the courtesy of the interview granted to Applicants' attorney on March 9, 2004 at which time the outstanding issues in this case were discussed. During the interview, the above changes to the claims were proposed and arguments substantially as hereinafter developed were presented. No formal agreement was reached pending the Examiner's detailed consideration of the application upon formal submission of a response to the outstanding Official Action.



In response to the rejections of claims 27, 29-36 and 38-40 under 35 U.S.C. 103(a) as being unpatentable over "PolyCon Management System Order Catalog" in view of Masahiko alone or in combination with at least one other reference, those grounds for rejection are respectfully traversed in light of the amendments to those claims. Independent claims 27 and 29 now recite "a plurality of second signal conditioning devices coupled to the remote computer systems, ... for supplying the information corresponding to the received first set of electronic signals to a user-input device input of a corresponding remote computer" and "wherein the first signal conditioning device further receives a second set of electronic signals, produced by the user-input device, via the first communication link for controlling the crosspoint switch to select one of the remote computer systems to receive information corresponding to a third set of electronic signals from the user-input device." Such features are not taught by the PolyCon/XS reference. The PolyCon/XS reference (by referencing the PolyCon/S reference) discloses controlling a switch using a numeric keypad, a set of up/down keys, or a timer, but commands from those controls are never sent to any of the remote computers. Thus, the PolyCon/XS reference did not see how to utilize a user-input device interface (e.g., a keyboard or a mouse), whose commands would normally be sent to one of the plural remote computers, to perform the functions performed by building a new physical control interface (i.e., the buttons on the control panel of the PolyCon/XS or the PolyCon/RC). Moreover, to manually change between computers, the PolyCon devices require that the new interface with its separate buttons be within reasonable reach to interact therewith, thereby increasing the number of things that are within reach of the user. However, by utilizing a user-input device that is already close to a user, the claims systems can reduce clutter without sacrificing functionality. Thus, none of the applied references disclose receiving a second set of electronic signals, produced by the user-input device, via



the first communication link to control the switch while passing a first set of electronic signals, produced by the user-input device, to one of the remote computers.

Moreover, the PolyCon/RC and the PolyCon Management Software do not disclose the same positively recited limitation. They instead use an additional serial connection. It was Applicants that recognized that remote configuration could be achieved through an existing user input interface so as to avoid additional connections. The cited references do not even recognize the possibility of such a solution, let alone a structure for achieving the solution. Since Masahiko does not overcome the deficiencies of the PolyCon references, claims 27 and 29 are patentable over the cited combination of references. Claims 30-36 and 38-40 are patentable over the cited references based on their dependence on claim 27.

In response to the rejection of claim 1 under 35 U.S.C. 103(a), this ground for rejection is respectfully traversed. The Office Action asserts without support that "It would have been obvious for one of ordinary skill in the art to modify the PolyCon/XS device to have OSD circuitry because it would have simplified operational control of the switch by enabling the control of the switch without having a CPU at the remote console to run the MS-Windows graphic shell and the management software or [the] dedicated keypad on the remote controller." However, the Office Action has not identified that such a motivation was known to those skilled in the art of KVM systems. First, the '087 patent is directed to home entertainment equipment such as televisions, videocassette recorders and compact disc players. See Col. 1, lines 15-18. Thus, the '087 patent is not directed to analogous art as compared with the KVM system area. Second, the PolyCon/XS and PolyCon/RC systems had existing control interfaces (e.g., keypads and serial interfaces), and there is no indication that these were considered deficient, especially since the systems could already be controlled. The '087 patent allows access to menus and a cursor control. However, unlike the home entertainment equipment of the '087 patent, the PolyCon-Management System already had

cursors and menus as it was built on top of a MS-Windows graphic shell. In short, the Office Action has cited reasoning for the change without showing that one of ordinary skill in the art would have appreciated that motivation at the time the applicants filed their priority application. "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.' Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious 'modification' of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 23 USPQ2d 1780, 1783-4 (Fed. Cir. 1992) (citation's omitted).

Simply put, if it was so obvious to perform the switching functions without needing the interfaces and software of the PolyCon systems, then why would the makers of the PolyCon systems not have done so, especially considering the cost of not having done so? Certainly, as shown by U.S. Patent No. 4,962,427, On-Screen Display (OSD) systems were well known prior to the 1994 PolyCon references. Thus, the next Office Action should cite some rationale as to why, despite the prior existence of OSD, one of ordinary skill in the art would have done what the makers of the PolyCon systems did not do. Any such citation should be supported by evidence within the reference or within what was provably known at the time applicants filed their priority application.

In response to the rejection of claim 44, claim 44 has been amended to recite "a user-input device decoder circuit for decoding plural user-input device commands, from a user input device connected to the video switch, responsive to the internally generated visual user

¹ Attached hereto as Exhibit 1.

interface, at least a first command of the plural user-input device commands establishing a communications path between (1) one of a plurality of computers connected to the video switch and (2) the user-input device and the connected display, and at least a second command of the plural user-input device commands being sent to the one of the plurality of computers connected to the video switch." As discussed above with reference to Claim 27, the PolyCon systems and the Masahiko system do not teach or suggest utilizing commands from a user input device, that would otherwise go to a remote computer, to control communication paths within the switch. Thus, claim 44 is patentable based on those deficiencies.

Likewise, although claim 1 was shown to be patentable above based on the fact that the Office Action provides an improper motivation to combine the references, it should be noted that claims 15 and 16 are separately patentable for reasons analogous to the reasons set forth above for the patentability of claims 27, 29 and 44. Claim 15 recites "a user-input device command detector ... configured to detect a first command by which the first user-input device requests that the analog video signals of one of the plural computers be replaced by analog video signals of another of the plural computers and configured to send commands other than the first command from the first user-input device to one of the plural computers." Claim 16 recites a similar limitation. Thus, claims 15 and 16 recite a structure and function which do not require the use of the extra interface of the PolyCon system. As such, the inventions of claims 15 and 16 are separately patentable, even if claim 1 is not found to be patentable.



Accordingly, in view of the foregoing, the present application is believed to be in condition for formal allowance. An early and favorable action is hereby respectfully requested.

Respectfully submitted,

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